

SENSOR ARRANGEMENT HAVING AN AIR INFLOW PATTERN FOR  
PREVENTING DIRECT DEBRIS IMPACT

ABSTRACT

A temperature sensor arrangement (100, 300) includes a sensor  
5 cavity (150), a temperature sensing element (330) being positioned along  
a center line (140, 340) of the sensor cavity (150) and generating a signal  
indicating temperature of air flowing thereto, and a generally cylindrical  
outer casing (105, 305) surrounding the sensor cavity (150). In one  
embodiment, the outer casing (105) includes a pattern of flow passages  
10 (110) for allowing air flow to the temperature sensing element (330) in  
the sensor cavity (150), the flow passages (110) being angled such that  
there is no direct line of air flow from an exterior of the outer casing (105)  
to the sensing element (330). In another embodiment, the flow passages  
(310) are arranged in an offset pattern relative to a center line (340) of  
15 the housing cavity (150), such that there is no direct line of air flow from  
an exterior of the outer casing (305) to the sensing element (330).